



## Long-range, Powerful and Optimal Wi-Fi Connectivity for Businesses

- High output power of up to 28 dBm delivers extended coverage
- 2 external antennas with high 5 dBi gain optimized for mobile devices
- Fast 802.11n Wi-Fi with speed up to 300 Mbps improves transmission of large files or videos
- Easy deployment via client mode or repeater AP and IEEE 802.3af PoE support
- ZON Utility and ZAC minimize repetitive configuration processes and efforts
- Certified WPA2 Enterprise, access control management and user traffic control for strict network protection

In the so-called BYOD trend, more than 80% of employees use at least one personally owned mobile device such as smart phones or tablets for business; however data transmission with these mobile devices is sometimes unstable because of their weak output power. To be the best accommodate mobile devices in the network, the new ZyXEL NWA1100-NH 802.11 b/g/n Long Range PoE Access Point features high output power and antenna gain to optimize wireless coverage and signal quality that are four times better for improved device connectivity. In addition, advanced management features also relieve tiresome configuration tasks for more than a few access points (APs). The NWA1100-NH is the best solution for businesses to streamline Wi-Fi connections.

### Benefits

#### Boost Wi-Fi coverage for more than 30%

Today, speed is no longer an issue for Wi-Fi, but coverage still is. That is, longer distance causes serious drop in throughput. The boosted output power of ZyXEL NWA1100-NH improves throughput in the same distance and thus extends the coverage comparing other APs with regular output strength. With even the same number of AP deployed, users can still enjoy better performance within the coverage.

#### Adaptive to the existing wiring infrastructure

Compliant with the 802.3af standard consuming power of less than 15 Watts, the NWA1100-NH not only saves energy but also adopts latency switches; as such there's no need to change the wired infrastructure and it helps businesses to minimize extra cost on new equipment setup.

#### ZyXEL ONE Network experience

Aiming for relieving our customers from repetitive operations of deploying and managing a network, ZyXEL ONE Network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. ZyXEL ONE Network presents an easy-to-use tool, ZyXEL ONE Network Utility (ZON Utility), to realize speed network setup. ZyXEL Smart Connect\* allows ZyXEL networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. ZyXEL ONE Network redefines the network integration across multiple networking products from switch to Wi-Fi AP and to Gateway.

\* ZyXEL Smart Connect is supported on selected models. Please refer to specifications for more detail.

#### Secured Wi-Fi access control

The devices requiring Wi-Fi connectivity are mostly mobile units and are mostly not corporate assets, so management to access privileges of such Wi-Fi clients is definitely required to secure the business network. The ZyXEL NWA1100-NH offers various ways to verify Wi-Fi clients in order to keep unauthorized users from connecting to the network or taking network resources.



ZyXEL **one**network  
Redefining network integration

**NWA1100-NH**  
802.11 b/g/n Long Range  
PoE Access Point

### Feature Highlights



Long Range

#### Long range coverage

With the boosted 28 dBm output power and 5 dBi high antenna gain, the ZyXEL NWA1100-NH can amplify signal transmitted and received for mobile devices with weak output power to connect to the Wi-Fi networks with ease. Thanks to this feature, the NWA1100-NH is able to provide WLAN connectivity to serve most client devices.



PoE Power Device

#### Powered device

The ZyXEL NWA1100-NH is designed to be flexible in various deployment scenarios. As a standard powered device (PD), the NWA1100-NH can work with 802.3af and 802.3at PoE switches to eliminate inconvenience caused by, for example, insufficient power outlets.



Wireless L2 Isolation

#### Wireless layer-2 isolation

The layer-2 isolation can protect the private network among client users and allow users to access the shared devices without entering the rest of private networks for enhanced security. Also, the intra-BSS blocking prevents peeping from Wi-Fi clients associated with same AP.



Wi-Fi Security

#### WPA2 enterprise certified

ZyXEL NWA1100-NH has been certified with industrial-strength WPA2 Enterprise protection and has wide range support of EAP (Extensible Authentication Protocol) types. It can be seamlessly integrated with corporate RADIUS servers.



ZON Utility

#### ZyXEL ONE Network utility

To streamline the management process, the ZyXEL NWA1100-NH comes with ZON utility for administrators to assign IP addresses of multiple APs through just one platform. Administrators can save the hassle logging into each AP to change the default IP addresses before physical installation.



ZyXEL AP Configurator

#### ZyXEL AP Configurator

After deploying a number of APs, repetitive configuration for the units takes time and effort. The ZyXEL AP Configurator (ZAC) allows batch AP configuration, backup and firmware upgrade in three easy steps to significantly reduce configuration time and effort.



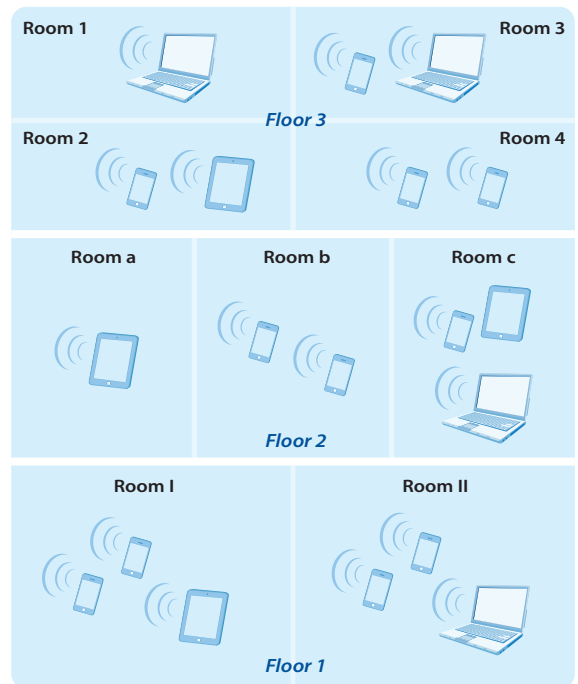
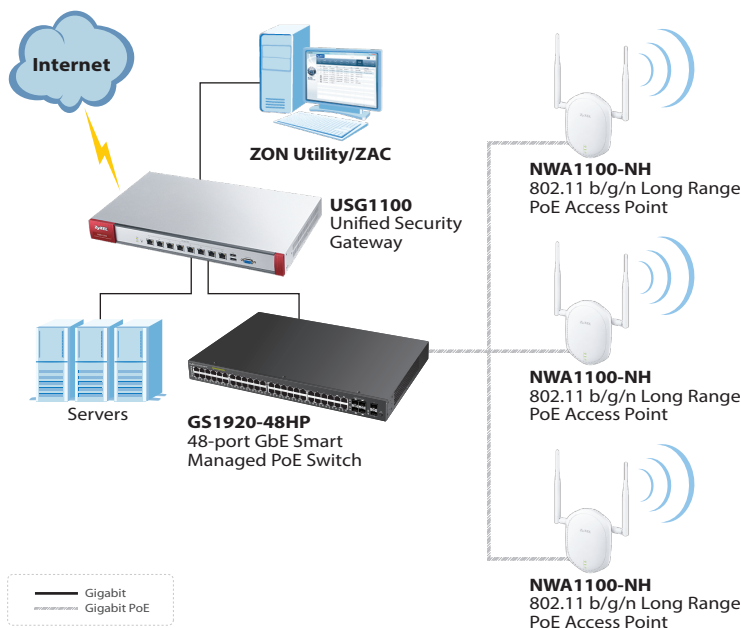
Access Control List

#### Access control list


For company without existing RADIUS server, administrators can utilize the Access Control List (ACL) to grant or block Wi-Fi access by entering MAC addresses of the client devices.

### Application Diagram

- Assign IP address of multiple APs through ZON utility
- Batch AP configuration, backup and firmware upgrade through ZAC



### Specifications

Model		NWA1100-NH
Product name		802.11 b/g/n Long Range PoE Access Point 
<b>Main Design</b>		
Wireless frequency		2.4 GHz
Radio		1
<b>RF Specifications</b>		
Number of antenna		2T2R MIMO
Antenna gain		5 dBi
Frequency band		2.4 GHz (IEEE 802.11 b/g/n) • USA (FCC): 2.412 to 2.462 GHz • Europe (ETSI): 2.412 to 2.472 GHz • Taiwan (TW): 2.412 to 2.462 GHz
802.11n premium features		<ul style="list-style-type: none"> <li>• 2x2 multiple-input multiple-output (MIMO) with two spatial streams</li> <li>• Maximal Ratio Combining (MRC)</li> <li>• 20- and 40-MHz channels</li> <li>• PHY data rates up to 300 Mbps</li> <li>• Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)</li> <li>• Cyclic Delay diversity (CSD) support</li> <li>• Maximum Likelihood Demodulation (MLD) support</li> <li>• Low Density Parity Check (LDPC) support</li> </ul>
Max. transmit power*		US (FCC) 2.4 GHz: 28 dBm, 2 antennas EU (ETSI) 2.4 GHz: 18 dBm, 2 antennas
Received sensitivity		2.4 GHz • 802.11b/g, min. up to -92 dBm • 802.11n/20 MHz, min. up to -91 dBm • 802.11n/40 MHz, min. up to -87 dBm
<b>LAN</b>		
Number of 10/100/1000M LAN		1
PoE		Yes
PoE power draw		6 W
<b>WLAN Security</b>		
WLAN maximum net throughput		Up to 110 Mbps
WMM (Wi-Fi certified)		Yes
WEP		Yes
WPA/WPA2-PSK		Yes
WPA/WPA2-Enterprise		Yes
EAP types		PEAP, EAP-TLS, -TTLS, -SIM, -FAST, -AKA, -MD5 and -GTC
Number of multiple SSID		8
IEEE 802.1x		Yes
MAC filtering		Yes
Layer-2 isolation		Yes
WLAN access control list		Yes
RADIUS authentication		Yes
<b>Network</b>		
IPv6 support		Yes
VLANs		Yes
DHCP client		Yes

\*: Max. total channel

Model		NWA1100-NH
<b>Management</b>		
ZAC		<ul style="list-style-type: none"> <li>• Batch AP configuration</li> <li>• Batch AP firmware upgrade</li> <li>• Batch AP profile backup</li> </ul>
ZON Utility		<ul style="list-style-type: none"> <li>• Discover ZyXEL switches, APs and gateways*</li> <li>• Centralized and batch configuration               <ul style="list-style-type: none"> <li>• IP configuration</li> <li>• IP renew</li> <li>• Device reboot</li> <li>• Device locating</li> <li>• Web GUI access</li> <li>• Firmware upgrade</li> <li>• Password configuration</li> <li>• ZAC access</li> </ul> </li> </ul>
Standalone AP mode		Yes
CLI		Yes
SNMP		v1, v2c, v3
<b>Others</b>		
Power supply		Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 1 A
MTBF (hr)		1,018,459.6
<b>Standard Compliance</b>		
Ethernet		IEEE 802.3, IEEE 802.3u, IEEE 802.3az, IEEE 802.3af
PoE		IEEE 802.3af
WLAN		802.11b: DBPSK, DQPSK, CCK 802.11g: BPSK, QPSK, 16-QAM, 64-QAM 802.11n: BPSK, QPSK, 16-QAM, 64-QAM
<b>Certifications</b>		
Radio		FCC Part 15C ETSI EN 300 328, EN60601-1-2 DGT LP0002
EMC		FCC Part 15B EN 301 489-1, EN 301 489-17, EN 55022, EN 55024, EN 61000-3-2/-3/EN60601-1-2 BSMI CNS13438
Safety		EN 60950-1 IEC 60950-1 BSMI CNS14336-1
<b>Physical Specifications</b>		
Item	Dimensions (WxDxH)(mm/in.)	153 x 110 x 38/6.02 x 4.33 x 1.5
	Weight (g/lb.)	240/0.529
Packing	Dimensions (WxDxH)(mm/in.)	285 x 210 x 72/11.22 x 8.26 x 2.83
	Weight (g/lb.)	602/1.327
Included accessories		<ul style="list-style-type: none"> <li>• Power adapter</li> <li>• Mounting screws</li> </ul>
<b>Environmental Specifications</b>		
Operating environment	Temperature	0°C to 60°C/32°F to 140°F
	Humidity	10% to 95% (non-condensing)
Storage environment	Temperature	-30°C to 70°C/-22°F to 158°F
	Humidity	10% to 95%

\* Gateway supports of the ZON utility will be available on the second half 2014.

For more product information, visit us on the web at [www.ZyXEL.com](http://www.ZyXEL.com)



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